One male, Alexander County, Virginia. Differs from the Q type in lacking all the dark purple brown shades. The Q has also four spurs on the hind tibiæ but otherwise agrees.

Larra.—This is the insect figured by Glover, (Ill. No. Am. Cont., Pl. 11, Fig. 1; Pl. 20, Fig. 40) and referred to by me in some detail (Proc. Ent. Soc. Wash., iv, 300).

The larva occurs sparingly in the vicinity of Washington, D. C., and has been known for a long time to the entomologists of the Department of Agriculture, but has not before been raised to maturity. There are some colored figures of the larva among the notes left by Dr. Riley and I have copied a description written by Mr. Pergande. Last season, with the kind assistance of Mr. Schwarz and Mr. Ashmead, I succeeded in getting a few larvæ from which the above described male moth was bred.

The larva has the arrangement of tubercles of *Phobetron* and only differs in their special modification. The subdorsal horns are of equal length, the lateral ones though covered by the subdorsals are rather long and slender and the whole larva is of a clear, pale green like glass, covered with the clear, spinulose hairs. Found on beech and oak.

# ON THE EARLY STAGES OF SOME CALIFORNIA LEPIDOPTERA.

By D. W. COQUILLETT.

## Hydrœcia angelica Smith.

The larvæ live singly in the stems of *Psoralea macrostachya*, sometimes causing the tops of the infested plants to die, but never killing the entire plant. Before pupating the larva gnaws a hole to the bark, but never or very seldom through it, then retires several (sometimes as much as eight) inches below this hole and closes the burrow both above and below itself, pupating within the cavity thus formed. The main burrow usually extends to, but never into the roots. The chrysalis is of the usual form, robust, polished, dark reddish brown and terminates behind in two diverging points; length, 22 mm. Eight of the

chrysalids and one empty chrysalis-skin was found Sept. 12, 1882, near Anaheim, Cal. The moths issued from Sept. 20 to Oct. 9. Larvæ and chrysalids were also found on Aug. 6, 1893, at Los Angeles, Cal., and the moths issued from Aug. 16 to 31.

#### Gloveria medusa Strecker.

Body mottled light and dark gray, a broad light gray dorsal stripe having a dark central line and showing lighter, more whitish spots situated on the anterior end of the middle segments; body very thickly covered with long black and shorter black and white hairs springing from the skin and not from warts; head clothed with hairs like the body, black, opaque, rough, a white median line extending from the vertex to the clypeus, where it divides and passes down along each edge of the latter; labrum white; spiracles very narrow, yellowish, ringed with black; venter colored like upper part of body; length, 80 mm. Found one June 29, 1890, crawling upon the ground near Newhall, Cal. Pupated July 26, in a very thin gray silken cocoon through which the chrysalis is plainly visible. Chrysalis of the usual form, dark brown, thinly covered with quite long yellowish hairs excepting on the antennæ, leg and wing-cases; ends posteriorly in a broad transversely flattened process which is thickly covered with short hooked spines; length, 38 mm. Moth issued Aug. 24.

## Nola involuta Dyar.

The description recently given as *N. minuscula* Zell (Journ. N. Y. Ent. Soc., VI, 249) should be credited to this species (Journ. N. Y. Ent. Soc., VI, 42).

#### Arthrochlora februalis Grote.

Resembles *Pyrophila pyramidoides*. Body green, a white dorsal and stigmatal line and a narrower, broken, more yellowish subdorsal line; on the posterior part of segment 10 this subdorsal line bends upward, almost crossing the following segment and nearly reaching the dorsal line; posterior end of body tapering rapidly to the anal legs, causing segment 11 to appear slightly humped; piliferous spots white, each giving rise to a short hair; spiracles pale brownish, faintly ringed with black; stigmatal line bordered above with pinkish on the anterior part of the body; 16 legs, each marked with pinkish; venter deep green, unmarked; cervical shield not apparent; head bluish green, the mouth-parts marked with black and reddish;

length, 30 mm. Found one June 1, 1890, on a wild plum tree (*Prunus ilicifolia*), in San Diego Co., Cal. A few days later it fastened several leaves together with a few silken threads but did not spin a perfect cocoon. It pupated June 7th and the moth issued April 9th of the following year.

#### Lycæna exilis Boisd.

Body flattened below, convex above, green, granulated, and covered with a short, sparse, whitish pubescence; head very small, wholly retractile, brownish black; 16 legs, very small; length, 6 mm. Found two August 4, 1887, near Los Angeles, Cal. One pupated August 8th and the butterfly issued August 14th.

#### Lycæna amyntula Boisd.

Body green, a blackish dorsal and less distinct subdorsal stripe, a faint black spot in the subdorsal space on segments 4 to 10; two faint pinkish stigmatal stripes; head shining black, wholly retractile; length, 12 mm. Found two in seed pods of *Astragalus crotalaria* early in April, 1887, near Riverside, Cal. One of them pupated April 22d and the butterfly issued May 6th.

### Pamphila phylæus Drury.

Body olive green, tinged with pink, and covered with small black granulations; a subdorsal row of larger, polished, brown piliferous spots; first segment broadly bordered behind with brownish black, reaching from one spiracle to the other, and divided by whitish dorsal line; other segments marked with a black dorsal line; spiracles light gray, ringed with black; head covered with small rounded elevations, brownish black, the groove on upper part of face bordered with light gray, reaching from apex of head to the clypeus, the latter bordered each side with a light gray line reaching from apex half way to base; near middle of clypeus are two vertical light gray dashes and outside of each lower corner is a light gray spot; in certain lights the ground color of the face appears to be light olive gray, spotted and dotted with brown; length, 22 mm. Found two under a stone near Los Angeles, Cal., October 22, 1888. One pupated November 2d and the butterfly issued on the 24th of the same month.

## Nisoniades funeralis Scudd.-Burg.

Body gray, thickly covered with raised whitish dots; a white subdorsal line which sometimes contains a yellow spot near the suture of

some of the segments; spiracles wholly whitish; head concave on top, brown, marked irregularly with darker brown, a row of three orange yellow spots on each side of the face and an additional one on each side of the head; posterior part of head where it joins the body velvet black, which color is interrupted above; length, 21 mm. Found two May 8, 1887, near Los Angeles, Cal., living singly in a nest of leaves on *Hosackia glabra*. One pupated May 14th and the butterfly issued June 4th.

#### NOTE ON THE SEVENTEEN-YEAR CICADA.

By Benjamin Lander.

Having had exceptional opportunities in 1894 to study the habits of the seventeen-year Cicada, I sent from time to time the results of my observations to the late Professor Lintner, then the State Entomologist at Albany, who requested me to watch for "left overs," as he termed them—belated ones likely to appear in 1895 and 1896. In both those years I noticed a few in the woods back of Nyack. Last year I was not so fortunate, but I heard of two specimens that were seen in the pupa state.

It will no doubt be interesting to those who have specially studied the Cicada to learn that during the last summer there were great numbers seen and heard in the woods and orchards about Nyack; even in the village streets. So many, in fact, that in some places in the woods their peculiar note could be heard almost continuously. On one tree back of my house I counted nine pupa-cases.

It is not at all likely that these were "left overs" from the great Hudson River Valley brood of 1894. It seems altogether likely that they were a part of brood XVII, of 1898, which are recorded as having appeared in the counties of Westchester and Richmond of this state, and in Essex County, New Jersey. If so, this is probably the first note of their occurrence in Rockland County, N. Y.

On June 10th, while visiting a piece of woods where the Cicadas appeared in vast numbers in 1894, I could hear them in every direction, but what was of far more interest to me, I saw the ruins of four